

Multiple microelectromechanical (MEM) device substrates, such as MEM mirror substrates, are tiled on a base substrate. Each MEM device substrate can include one or more MEM devices such as mirrors. By including one or a relatively small number of devices on a MEM device substrate, the MEM device substrate can be manufactured with relatively high yield and can be tested prior to tiling onto the base substrate. The separate MEM device substrates and base substrate can also reduce crosstalk and/or other signal interference which could degrade MEM device operation. Solder bumps and/or other mounting techniques may be used to mount the MEM device substrates onto the base substrate.